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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,036

12/15/2003

Robert A. Cordery

F-482

4048

7590

06/07/2004

Pitney Bowes Inc.
Intellectual Property and Technology Law Dept.
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EXAMINER

TRAIL, ALLYSON NEEL

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,036

Applicant(s)

CORDERY ET AL.

Examiner

Allyson N Trail

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 1-10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This application is in condition for allowance except for the following matters:

Claim Objections

2. Claim is objected to because of the following informalities:

Re claim 1, line 15: Substitute "determining the linearity" with --determining linearity--.

Re claim 1, line 21: Substitute "determining the linearity" with --determining linearity--.

Appropriate correction is required.

3. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE **TWO MONTHS** FROM THE DATE OF THIS LETTER.

Allowable Subject Matter

4. Claims 1-10 would be allowable upon the correction of the objections to claims 1 and 8.

5. The following is an examiner's statement of reasons for allowance: The best prior art of record, taken alone or in combination, fails to specifically teach or fairly suggest the method for reconstructing global geometry of a two-dimensional barcode susceptible to geometrical distortion, disclosed in the current invention. Although prior art has teachings of methods for overcoming distortion of a two-dimensional barcode, the prior art taken of record fails to teach each of the specific and detailed limitations of

the claimed method for reconstructing global geometry of a two-dimensional barcode susceptible to geometrical distortion. The barcode of the claimed invention has a two-dimensional pattern composed of a plurality of contrasting polygons and comprises a plurality of common corners, which are located at different locations within the two-dimensional pattern. Each of the common corners are defined by a group of the contrasting polygons located adjacent to each other. The actual method for reconstructing is discussed next. One of the features of the method include, acquiring an image of at least a part of the two-dimensional pattern and comparing at least a portion of the acquired image with at least one template pattern for finding a match between the acquired image and the template pattern. More specifically, each of the at least one template pattern comprises a group of contrasting sections located adjacent to each other defining at least one further common corner. Another feature of the method includes, locating a number of common vertices within the two-dimensional pattern based on the further common corner. A further feature of the method includes obtaining a plurality of distances between the located common corner, and determining the linearity of at least a portion of the two-dimensional pattern based on the obtained distances in order to reconstruct global geometry of the barcode.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Iida et al (6,612,497), Giordano et al (2003/0089779), HE et al (2002/0088865), van Haagen et al (5,889,270), Wang et al (5,880,453), Bravman et al (5,866,888), Cheung et al (2004/0026511), Nakazawa et al (2003/0116628), and Hara et al (5,726,435).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Allyson N. Trail* whose telephone number is (571) 272-2406. The examiner can normally be reached between the hours of 7:30AM to 4:00PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571) 272-2398. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [allyson.trail@uspto.gov].

All Internet e-mail communications will be made of record in the application file.

PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Allyson N. Trail
Patent Examiner
Art Unit 2876
May 28, 2004

A handwritten signature in black ink, appearing to read 'Thien M. Le', with a stylized, flowing script.

THIEN M. LE
PRIMARY EXAMINER